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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,074	10/30/2001	Charles C.H. Chen	RWIN-25,917	6726
31782	7590	03/29/2005	EXAMINER	
CHAUZA & HANDLEY, L.L.P.			HOLLOWAY III, EDWIN C	
PO BOX 140036			ART UNIT	PAPER NUMBER
IRVING, TX 75014			2635	

DATE MAILED: 03/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/004,074

Applicant(s)

CHEN ET AL.

Examiner

Edwin C. Holloway, III

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 October 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21-24 is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                                                        |                                                                                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10-30-01, 5-22-02</u> . | 6) <input type="checkbox"/> Other: _____                                                |

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***EXAMINER'S RESPONSE***

1. In response to the application filed, 10-30-2001 the application has been examined. The examiner has considered the presentation of claims in view of the disclosure and the present state of the prior art. And it is the examiner's opinion that the claims are unpatentable for the reasons set forth in this Office action:

***Drawings***

2. The drawings are objected to photographs are not normally permitted in utility patent applications. Figs. 2-5 include photographs in which the elements of the invention are difficult to ascertain. Because the subject matter of the application admits of illustration, applicant is required to submit drawings in place of the photographs in figs. 2-5. See 37 CFR 1.84 (b)(1). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining

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figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### ***Claim Objections***

3. Claim 4 is objected to because of the following informalities: Claim 4 recites "the forward signal and the reverse signal," but depends from claim 1 that lacks these signals. Therefore, applicant should either change "the" to "a" or amend claim 4 to depend from claim 2. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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5. Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, the structure or circuit to provide the "fame of bits" is unclear and the connections between this structure, the modulator and the transmitter are unclear. Further, the term "type" makes the claim indefinite. The addition of the word "type" to an otherwise definite expression (e.g., Friedel-Crafts catalyst) extends the scope of the expression so as to render it indefinite. Ex parte Copenhaver, 109 USPQ 118 (Bd. App. 1955). Likewise, the phrase "ZSM-5-type aluminosilicate zeolites" was held to be indefinite because it was unclear what "type" was intended to convey. The interpretation was made more difficult by the fact that the zeolites defined in the dependent claims were not within the genus of the type of zeolites defined in the independent claim. Ex parte Attig, 7 USPQ2d 1092 (Bd. Pat. App. & Inter. 1986).

In claim 9, "said on/off switch" lacks proper antecedent basis because claim 6 recites "a single on/off press-type switch," but claim 9 depends from claim 1. Claim 1 does not include any switch.

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***Claim Rejections - 35 USC § 102 & 103***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Clark (US 3793636). Regarding claim 1, Clark discloses a wireless control system with transmitter 32 and modulator 31 for modulating a frame of bits (cycle format in

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figs. 2-9) including a control field (control data bytes 5-12 in fig. 2). See col. 3 line 33 - col. 4 line 55. Regarding claim 4, Clark includes a multiple bit security code (station identification code) in figs. 2-3 and col. 4 lines 35-46 and circuit 24 for transmitting security code and forward / reverse (sign) signal in fig. 4 and col. 4 lines 47-67.

10. Claims 2-3, 5 and 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark (US 3793636) as applied above in combination with Dilks (US 5522582) and Seitsonen (US 51047773).

Regarding claims 2-3 and 5, Clark discloses a wireless control system with forward and reverse direction signals represented by sign of the control data byte in col. 4 lines 46-64 and a stop signal represented by the zero control command in col. 5 lines 15-25. But Clark does not disclose forward and reverse switch and stop generated when the switches are released.

Dilks discloses an analogous art remote control system with forward and reverse signals generated by forward and reverse push buttons in col. 3 lines 43-64 and reverse signal generated when the switches are released in col. 5 lines 10-20. This provides a simple and inexpensive design, but lacks wireless

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communication. See col. 1 line 53 and col. 2 lines 18-19.

Seitsonen discloses a similar push button remote control with wireless communication and processor control for safety and ergonomics. See col. 2 line 66 and col. 4 line 67. The communication may be wired or wireless in col. 5 lines 11-14.

Regarding claims 2-3, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included in Clark the switch arrangement for forward, reverse and stop of Dilks to provide simple and inexpensive control. It further would have been obvious to have communicated the signals wirelessly because Seitsonen teaches that wired and wireless connections are interchangeable and Clark discloses in col. 1 lines 5-25 of that wireless (non-conductive) connection is important. Regarding claim 5, it further would have been obvious to have included the microprocessor of Seitsonen in the combination applied above to provide improved safety.

Regarding claim 13-17, these limitations are included in claims 1-3 and 5 with the addition of a handheld case that would have been obvious for the same reasons applied above to claims 1-3 and 5 and further in view of the handheld of Dilks and/or Seitsonen for ease of use and ergonomics.



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11. Claims 6-8 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark (US 3793636) as applied above in combination with Eder (US 4313227).

Regarding claims 6-8 and 18, Clark lacks an on/off switch with visual indicator, but Eder discloses an analogous art remote control transmitter with power switch and indicator and timer to automatically turn off power after a period of time without input activity to prevent wasteful power drain. See col. 5 lines 11-31 and col. 6 lines 11-35. Regarding claims 6-8 and 18, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included the power switch, indicator and timer of Eder in the transmitter of Clark for to prevent wasteful power drain. Blinking of claim 7 would have been an obvious manner to light the indicator as is well known to the artisan to gain the attention of the user in the same manner as flashing advertisements on web pages.

12. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark (US 3793636) as applied above in combination with Dilks (US 5522582) and Seitsonen (US 51047773) and Eder (US 4313227).

Regarding claims 9-10, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included in Clark the switch arrangement for forward,

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reverse and stop of Dilks to provide simple and inexpensive control with wireless communication of Seitsonen for safety as applied above to claims 2-3 and 5. It further would have been obvious to one of ordinary skill in the art at the time the invention was made to have included the power switch, indicator and timer of Eder in the transmitter of Clark for to prevent wasteful power drain as applied above to claims 6-8. Regarding claim 11, repeated transmission would have been obvious because redundant transmission to reduce errors is well known for increase safety as suggested by the desirability to safeguard against interference in col. 9 lines 43-46 of Clark.

13. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clark (US 3793636) as applied above in combination with Bae (US 6359589).

Regarding claim 12, Clark includes a receiver antenna 66, but lacks the antenna details of claim 12. Bae discloses a microstrip or foil dipole antenna with improved gain and small size in the abstract and col. 1 lines 5-15, col. 2 line 47-54. Use in a remote control receiver is disclosed in col. 2 line 10 and dipole is disclosed in col. 6 lines 57-64. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included the antenna details of Bae in the receiver of Clark for advantages such as improved gain

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and because Bae suggest use of such antennas in remote control receivers.

14. Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark (US 3793636) in combination with Dilks (US 5522582) and Seitsonen (US 51047773) as applied above further in view of Willmott (US 3906348).

Clark discloses frequency shift modulation rather than the pulse width and amplitude modulation of claims 19-20. Willmott discloses an analogous art digital radio control for with binary coding to prevent inadvertent/accidental operation. See col. 1 lines 9-39. Willmott discloses ones and zeros modulated by pulse width (length) and amplitude (on/off keyed RF oscillator) in col. 1 line 59 - col. 2 line 4, col. 3 lines 31-47 and col. 5 lines 21-52. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included in the combination applied above the modulation by pulse width and amplitude modulation of claims 19-20 disclosed by Willmott in place of the frequency shift modulation of Clark as an obvious alternative manner of modulating binary signals to avoid inadvertent or improper operation.

***Allowable Subject Matter***

15. Claims 21-24 are allowed.

16. The following is a statement of reasons for the indication

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of allowable subject matter: The cited prior art does not teach nor fairly suggest the wireless control winch of claim 21 including a wireless hand-held transmitter and vehicle mounted receiver with, among other things, the following limitations. The transmitter including forward switch, reverse switch, power switch and processor, wherein the processor is programmed to modulate an RF carrier with a security code and a control code. The control code including a forward code, reverse code and stop code modulated by the processor in response to, respectively, activation of the forward switch, activation of the reverse switch and deactivation of either switch. The receiver coupled to a horizontally polarized dipole antenna mounted in the vehicle and the receiver including a demodulator and driver circuit to drive a solenoid arrangement coupled to a battery of the vehicle for driving current through a winch motor to wind a cable on a reel in a forward position, driving current through a winch motor to unwind the cable on a reel in a reverse position and disconnecting the winch motor from the batter in response to demodulated forward code, reverse code and stop code, respectively.

### ***Conclusion***

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hensley (US

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3362678), Fiorentino (US 3699578 and 3732570), Bonner (US 3774217), Pitman (US 3906369), Simnovec (US 4621375), Backstrand (US 5548198) and Aho (US 5692735) disclose remote control systems for hoist/winch.

#### **CONTACT INFORMATION**


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact an Electronic Business Center (EBC) representatives at 703-305-3028 or toll free at 866-217-9197 between the hours of 6 a.m. and midnight Monday through Friday EST, or by e-mail at [ebc@uspto.gov](mailto:ebc@uspto.gov). The Patent EBC is a complete customer service center that supports all Patent e-business products and service applications. Additional information is available on the Patent EBC Web site at <http://www.uspto.gov/ebc/index.html>.

Any inquiry of a general nature should be directed to the Technology Center 2600 receptionist at (571) 272-2600.

Facsimile submissions may be sent via fax number (703) 872-9306 to customer service for entry by technical support staff. Questions regarding fax submissions should be directed to customer service voice line (703) 306-0377.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edwin C. Holloway, III whose telephone number is (571) 272-3058. The examiner can normally be reached on M-F (8:30-5:00). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on (571) 272-3068.

EH  
3/13/05

  
EDWIN C. HOLLOWAY, III  
PRIMARY EXAMINER  
ART UNIT 2635